

Mark Scheme (Results)

Summer 2015

Pearson Edexcel GCSE in ICT (5IT01)
Paper 01 Living in a Digital World

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question 1

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(i)	Desktop D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(ii)	Desktop A			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(iii)	Desktop D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01b	Any one from: 1. Eye strain 2. Eyesight damage 3. Headaches	Eye damage (without mentioning 'sight')	Effects on health related to eyes must be related to strain / vision / sight	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01c(i)	Any two from: <ol style="list-style-type: none"> 1. Processor 2. RAM 3. Motherboard 4. Storage / Hard drive 5. Optical drive 6. Monitor/Screen size/type/number(multiple) 7. Mouse / Graphics tablet 8. User interface 9. Expansion capability 10. Applications / software 11. Performance (<i>see below</i>) Only accept 'performance' if no mark has already been awarded from 1 st group.	Screen resolution 'Screen' without clarification	Accept proprietary names for software.	(2)
Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01c (ii)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01d	Any three from: 1. USB 2. Firewire 3. Ethernet 4. Audio / Auxiliary cable 5. Thunderbolt 6. Lightning 7. Serial (PS/2, Mini-DIN) 8. Parallel 9. VGA 10.HDMI 11.Displayport 12.DVI 13.eSATA	'Cable' on its own		(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01e	Any one from: <ol style="list-style-type: none"> 1. Limited storage / takes up a lot of storage 2. More storage online 3. No remote access 4. Data loss, if device damaged/lost 		Accept advantages of storing online as well as disadvantages of storing locally	(1)
Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01f (i)	Any one from: <ol style="list-style-type: none"> 1. To direct data / network traffic 2. To allow devices to share an internet/intranet connection Accept: To provide internet access 3. To allow devices to share data		Modern routers usually contain a modem to provide internet access and a switch to allow devices to share data.	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01f (ii)	Any two from: <ol style="list-style-type: none"> 1. More than 5 characters long 2. Mix of numbers / letters 3. Mix of case 4. (Includes) special characters 5. Not a word linked to Sarah (e.g. not her name / Date of birth) 6. Not a common word 	<ul style="list-style-type: none"> • Numbers (on its own) • Letters (on its own) 	1 mark max for giving an example of a correctly formed password. A reference to numbers and letters anywhere in the response is enough to gain a mark.	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02a	Any three advantages from: 1. Access from anywhere (with connection) 2. Can be shared 3. Synchronise with other devices 4. Don't need to install local software	Access any time		(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02b (i)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02b(ii)	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02c (i)	An explanation to include two from: <ol style="list-style-type: none"> 1. (Appropriate keywords) are used to match (1) 2. image files' metadata/descriptions (1) 3. to produce fewer results (1), 4. which are more relevant / valid (1) 			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02c (ii)	Any three from: <ol style="list-style-type: none"> 1. Location 2. (File) size 3. (File) type 4. Dimensions 5. Colour 6. Author 7. Copyright licence 8. Rating/Popularity/Views/Likes 			(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02d	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02e	Any one from: <ol style="list-style-type: none"> 1. Document creation / collaboration 2. Online data storage 3. Backup 4. Email services 5. Hosted applications 6. Database processing 7. Technical support services 	Google (on its own) Apple (on its own) etc.	Accept proprietary names	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02f	Any two from: <ol style="list-style-type: none"> 1. Creates more pollution (from increased power consumption) / global warming 2. Reduces pollution (from commuting) 3. Uses more resources (fuels) 4. Uses fewer resources (paper) 	Uses more/less energy	Candidates may give both negative and positive impacts if they are qualified. 1 mark max if neither point is qualified. e.g. 1 mark awarded for: - reduces pollution - increases pollution	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03a (i)	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03a(ii)	A description to include: Encoding/scrambling data (1) so that it can only be accessed with the key / code / can't be accessed without the key / code (1)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03b	A description to include: Sarah's data / information / phone can be accessed / hacked (by unauthorised users) (1) and used for criminal purposes / to breach her privacy (e.g. read her emails) (1)	Sarah can be hacked (without specifying what can be hacked)	'Access her emails' is not enough for both marks. 'Access and read her emails' would gain both marks.	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03c	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03d(i)	An explanation to include four from: <ol style="list-style-type: none"> 1. She is concerned by / doesn't recognise the link / sender (1) 2. the link could run a virus / open a phishing site, (1) 3. which can put her system / data at risk (1) 4. (security) definitions change (1) 5. as new threats are released (1) 6. and her definitions may be out of date (1) 		Candidates may use the term 'malware' instead of 'virus'	(4)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03d(ii)	Any two from: <ol style="list-style-type: none"> 1. Antivirus 2. Antispyware 3. Antiphishing 4. Firewall 5. Spam filter 6. Encryption 	Proprietary names	Antimalware can be awarded a mark if no mark has already been awarded for mark point 1, 2 or 3	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03e(i)	An explanation to include three from: Streaming video requires lots of data / bandwidth (1) reducing the bandwidth available to other users (1) negatively affecting the experience of other users (1)		'Negatively affecting the experience' may be articulated as 'low internet speed', etc.	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03e(ii)	Any one from: 1. 3G 2. 3.5G 3. 4G 4. LTE / Long term evolution 5. Mobile Broadband 6. HSPA / High speed packet access 7. HSDPA / High speed download / downlink packet access 8. HSUPA / High speed upload / uplink packet access	2G 2.5G		(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04a (i)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04a(ii)	An explanation to include: Location / position / movement (1) is available to unwanted others (1) or People can track / locate (1) individuals, for inappropriate purposes (1)		Responses may include examples of 'inappropriate purposes' such as 'stalking' etc.	(2)
Question Number	4	Do not accept	Additional Guidance	Mark
Q04b	A description to include: Photos / blog / site / page / it will (down)load / appear on screen (1) faster / so the user does not have to wait (1)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04c	A description to include two from: <ol style="list-style-type: none"> 1. Visitors' (like) activity will be seen by friends / connections. (1) 2. The likes / photographs go viral / spread (through their networks) (1) 3. (therefore) friends are more likely to visit the blog/view the photographs (1) 4. (because) friends influence each other (more than organisations do) (1) 			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04d	An explanation to include three from: Gathering / using data / information (1) used for targeted marketing (1) raises privacy concerns (1)	'security' (in place of 'privacy')		(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04e	A description to include: To receive regular / automatic (1) (content) updates (1) OR They can be (automatically) sent / subscribe to (1) the most recent content / posts / photos (1)			(2)

Question Number	Answer
<p>Q04f QWC (i-iii)</p>	<p>Indicative content for a discussion on the rights and responsibilities associated with digital communication.</p> <p>Legal: Freedom of speech / expression is an inherent human right Copyright (and fair use) restricts / provides for the use of content Privacy</p> <p>Moral / ethical Consideration of audience Unintended audiences (posts about employers on social media may be read by employers / 'Jokes' can be misinterpreted) Netiquette Censorship (restrictive and protective):</p> <ul style="list-style-type: none"> • Political / Cultural • Ineffectiveness of censorship online • Self censorship and the responsibility of the individual <p>Complications: Existing law was not designed for the digital world and so hard to enforce / interpret (e.g. permanence / records of comments) Right to be forgotten. Anonymity Resultant change in culture and law Nature of digital communication facilitates the wide distribution of content.</p>

	Level	Mark	Descriptor
		0	No rewardable content
	Level 1	1-2	Candidates will produce brief responses, making a limited number of simple statements , probably with a limited reference to responsibilities or challenges associated with digital communication.
			Candidates' responses will be general .
			They have used everyday language but their response lacks clarity and organisation . Spelling, punctuation and the rules of grammar are used with limited accuracy .
	Level 2	3-4	Candidate's responses will be mostly accurate and will include some relevant responsibilities or challenges associated with digital communication.
			Candidates will have made some attempt to discuss the points that they make.
			They have used some specialist terms and their response shows some focus and organisation . Spelling, punctuation and the rules of grammar are used with some accuracy .
	Level 3	5-6	The candidate will produce a factually accurate response that includes relevant responsibilities and challenges associated with digital communication.
			A discussion is presented with points developed.
			They have used appropriate specialist terms consistently and the response shows good focus and organisation . Spelling, punctuation and the rules of grammar are used with considerable accuracy .

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05a	<ul style="list-style-type: none"> • Copyright Design and Patents Act / CDPA • Copyright Act 		Ignore year, if given.	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05b	<p>Any three from:</p> <ol style="list-style-type: none"> 1. Wider audience / Widespread reach of the internet 2. Targeted marketing 3. Collecting customer's (transactional) data 4. Reduced overheads 5. Photos can be sold at any time (24/7/365) 	Responses related to payment.		(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05c(i)	<p>Any one from:</p> <ol style="list-style-type: none"> 1. Lower handling fees / costs 2. More customers / more income (Enable users who cannot pay by card to buy photographs) 3. Increased customer trust 	Cheaper (etc) without expansion		(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05c(ii)	Any three from: 1. Padlock (symbol) 2. 'https' (in address line) 3. Colour of address bar 4. Verisign® / Norton Secured (etc.) information			(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05d	A description to include four from: 1. Users' previous activity / visits / page views (are stored) (1) 2. in cookies, (1) 3. read (1) 4. then analysed (1) 5. then matched (1) 6. with other photos that contain similar key data / metadata (1)		A description of a process requires logically linked responses for maximum marks. Individual statements score 1 marks max. Candidates may respond using other examples of transactional data and / or examples of metadata	(4)

Question Number	Answer		
Q05e QWC (i-iii)	Indicative content for a discussion of the advantages & disadvantages to Sarah (photography/travel/blog etc.) of selecting a desktop:		
	Indicative content	Advantages of desktops	Disadvantages of desktops
	Technology	Performance of desktop components far outperforms other form factors	Components (processors / hard drive / graphics etc.) are bigger and require more cooling
	Portability / New form factors:	Screen sizes of monitors more suited to image editing. Touchscreen input peripherals are now common making photo work more natural.	Laptops / Tablets / Smartphones: Long battery life, size, weight, user interface, integrated sensors and apps make it easier to work on the move.
	Connectivity	Wired connections are more reliable and often faster. More connectivity options.	-
	Upgradability / Servicing	Desktop form factor is becoming the only one to allow user to do this.	-
	Specialism	Image editing requires the latest performance with increasing demand from new software features that higher quality images.	Convergence removes the need for multiple specialist devices. Many photographers now work purely on mobile digital devices such as smartphones.
	Cost	Desktops can be custom built cheaply	Convergence reduces cost

	Level	Mark	Descriptor
		0	No rewardable content
	Level 1	1-2	Candidates will produce brief responses, making a limited number of simple statements , probably with a limited reference to advantages or disadvantages of desktops or other types of computer.
Candidates' responses will be general and not relevant to Sarah .			
They have used everyday language but their response lacks clarity and organisation . Spelling, punctuation and the rules of grammar are used with limited accuracy .			
	Level 2	3-4	Candidate's responses will be mostly accurate and will include a number of advantages or disadvantages of desktops .
Candidates will have made some attempt to form a discussion that is mostly relevant to Sarah			
They have used some specialist terms and their response shows some focus and organisation . Spelling, punctuation and the rules of grammar are used with some accuracy .			
	Level 3	5-6	The candidate will produce a factually accurate response that includes a range of advantages and disadvantages of desktops and other computers .
A discussion that is directly relevant to Sarah .			
They have used appropriate specialist terms consistently and the response shows good focus and organisation . Spelling, punctuation and the rules of grammar are used with considerable accuracy .			

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